

SECTION 15160
STORM DRAINAGE PIPING

LANL MASTER CONSTRUCTION SPECIFICATION

When editing to suit project, author shall add job-specific requirements and delete only those portions that in no way apply to the activity (e.g., a component that does not apply). To seek a variance from applicable requirements, contact the Engineering Standards Manual (ESM) Mechanical POC.

When assembling a specification package, include applicable specifications from all Divisions, especially Division 1, General Requirements.

Delete information within "stars" during editing.

Refer to Specification 02630 for site storm drainage system.

Specification developed for ML-3 / ML-4 projects. For ML-1 / ML-2, additional requirements and QA reviews are required.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Building storm drainage piping, fittings, and accessories within building wall.

1.3 SUBMITTALS

- A. Submit the following in accordance with Section 01330, Submittal Procedures:
 - 1. Catalog data on pipe materials, fittings and accessories.
 - 2. Installation instructions for accessories.

PART 2 PRODUCTS

2.1 PRODUCT OPTIONS AND SUBSTITUTIONS

- A. Comply with Section 01630, Product Options and Substitutions.

2.2 STORM DRAINAGE PIPING, ABOVE GROUND

- A. Cast Iron Pipe and Fittings: CISPI 301 hubless, service weight.
 - 1. Joints: CISPI 310, neoprene gaskets and stainless steel clamp/shield assemblies.
- B. Cast Iron Pipe and Fittings: ASTM A74, service weight.

- 1. Joints: Bell and spigot, ASTM C564, rubber gaskets.
- C. PVC Pipe and Fittings: ASTM D3034, SDR 35.
 - 1. Joints: Bell and spigot, ASTM D3212, rubber gaskets.
- D. PVC Pipe and Fittings: ASTM D3034 or ASTM D2665.
 - 1. Joints: Solvent weld, ASTM D2855, with ASTM D2564 solvent cement.

2.3 ROOF DRAINS

- A. Manufacturer: J.R. Smith Mfg. Co.
- B. [Select roof drains determined by roof construction, expected rainfall, etc. Refer to manufacturer's catalog data for selection criteria.]

2.4 CLEANOUTS

- A. Manufacturer: J.R. Smith Mfg. Co.
- B. [Select cleanouts to suit project. Refer to manufacturer's catalog data for selection criteria.]

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify excavations are to required grade. Do not over excavate.

3.2 PREPARATION

- A. Ream pipe ends and remove burrs.

3.3 INSTALLATION

- A. Comply with Uniform Plumbing Code (UPC).
- B. Extend cleanouts to finish floor or wall surface. Lubricate threaded cleanout plugs with non-hardening thread lubricant. Ensure clearance at cleanout for snaking drainage system.
- C. Install floor cleanouts at elevation to accommodate finished floor.
- D. Route piping in orderly manner and maintain gradient. Route parallel and perpendicular to walls.
- E. Install piping penetrating roofed areas to maintain integrity of roof assembly.
- F. Install bell and spigot pipe with bell end upstream.
- G. Sleeve and caulk pipes penetrating exterior walls or interior bearing walls. Provide

waterproof installation for exterior walls. Provide UL/FM approved through-penetration firestop system when penetrating fire-rated barriers (i.e., walls, floors, etc.).

- H. Test piping system with water in accordance with Section 15992.
- I. Label piping in accordance with Section 15075.
- J. Support piping in accordance with Section 15060.
- K. Provide splash blocks under downspout nozzle when required to control erosion.

END OF SECTION

Do not delete the following information:

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This project specification is based on LANL Master Construction Specification Rev. 2,
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